

# (12) United States Patent

Aboulhosn et al.

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### (54) PEER-TO-PEER FILE SHARING

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**U.S. Cl.** ...... **707/10**; 707/3; 707/102; 707/200

707/102, 204; 709/205, 203

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#### (57)**ABSTRACT**

A method and system for sharing files between a group of computer systems. The file sharing system allows a group of computer systems to be defined. The files shared by a group are associated with a group folder. A group folder is represented by a folder created by the file system of each member of the group. The folder at each member contains a file for each file that is shared by the group. The files in the folder of a member may be actual files stored at that member, which contains the content of the shared file, or virtual files identifying the actual file that is stored at another member. When a member accesses a virtual file, the file sharing system detects the access and requests that the file owner provide a copy of the file to the accessing member on a peer-to-peer basis. Whenever a shared file is modified, the file owner sends updated metadata for that file to the other members of the group.

## 43 Claims, 15 Drawing Sheets

